

Midway's

GAME NO. 583
SEPTEMBER, 1974

CHOPPER PARTS CATALOG



MIDWAY MFG. CO.
10750 WEST GRAND AVENUE
FRANKLIN PARK, ILLINOIS, 60131, U. S. A.

PHONE: (312) 451-1360 CABLE ADDRESS: MIDCO TELEX NO.: 72-1596

TABLE OF CONTENTS

	Page No.
GENERAL INSTRUCTIONS	1
GENERAL ADJUSTMENT INFORMATION	2
LAMP & MOTOR REPLACEMENT	3
CABINET BREAKDOWN DETAIL	4
CHOPPER, COMPONENT LAYOUT	5
CONTROL BOX ASSEMBLY	6—7
TOWER ASSEMBLY	8—9
TARGET ASSEMBLY	10—11
TAPE DECK	12—13
PLAYFIELD COMPONENTS	14—15
ADDITIONAL PARTS LIST	16
EQUIPMENT CHART	Inside Cover

GENERAL INSTRUCTIONS FOR "CHOPPER"

1. INSTALLATION:
 - A. Fasten leg levelers to four legs and attach to cabinet with provided bolts.
 - B. Prepare helicopter for flying:
 1. Open both rear doors.
 2. Remove rear scenery panel. Four wood screws hold it in place.
 3. Remove shipping bracket holding helicopter to playfield.
 4. Attach counter weight (shipped in coin box). Position counter weight even with edge of tape and lock in place with nut. This position has been adjusted at the factory for best flying conditions.
 5. Reassemble rear scenery panel.
 - C. The power is controlled by a switch located in the rear corner on the bottom of the cabinet. Plug into A.C. only, 115 volts, 60 cycles. In low line areas (100 volts or less), a boost in the output voltage of the transformer may be achieved by removing the wire from the 115 volt tap of the transformer and re-wiring to the 105 volt position.
 - D. In the event the game is tilted or the line cord is removed, any credits accumulated will be reset to zero.
2. EXTENDED PLAY ADJUSTMENT:
Located on Logic Board (PC 583-904) and is adjustable from 5 to 14 hits by re-wiring jumper as indicated on the board. Extended play awards 50% additional flying time.
3. COIN ADJUSTMENT:
Located on Logic Board (PC 583-904) and may be adjusted from 1 to 4 coins per play by re-wiring jumper as indicated on the board.
4. PLAYS PER COIN:
Located on Logic Board (PC 583-904) and may be adjusted to 1 or 2 plays per coin by re-wiring jumper as indicated on the board.
5. TIME ADJUSTMENT:
Located on Logic Board (PC 583-904) and may be adjusted at 1 minute to 2 minutes 40 seconds, (that is 1 minute 1st position, 1.20 – 1.40 – 2.00 – 2.20 – 2.40 last position), by re-wiring as indicated on the board (→ increase).
6. PLAYFIELD SERVICE SWITCHES:
Located on mech panel. To service, follow instructions in back-box area.
7. PHOTO-CELL SENSITIVITY CONTROLS:
Located on Photo-Cell Detector (PC 583-924) on the lower back door. To increase sensitivity (makes target easier to hit), rotate controls as indicated.
8. VOLUME CONTROLS:
Located on Amplifier (PC 583-926) on lower back door. To increase volume, rotate as indicated.

MIDWAY MFG. CO.

10750 WEST GRAND AVENUE

FRANKLIN PARK, ILLINOIS

PAGE 1

GENERAL ADJUSTMENT INFORMATION FOR "CHOPPER"

These adjustments are to be made only if the game malfunctions.

1. PITCH CONTROL LINK:

With the pitch control handle (right handle) at its center position (straight up), adjust the thread portion of the link until the helicopter rises vertically "only", when power is applied (a slow drift is okay).

2. POWER CONTROL POT:

- A. Disconnect motor speed edge connector (PC 583-913).
- B. Adjust (5k) copter pot (left handle) for 250 ohms.
 - (1) Connect ohm meter between G-R and W-G at pot.
 - (2) Loosen set screw and remove gear.
 - (3) Rotate pot to 250 ohms.
 - (4) Replace gear, tighten set screws and connect jack at PC 583-913.
- C. Connect D.C. volt meter across copter wipers and adjust trim pot on copter motor speed (PC 583-913) to 2 V.D.C. at zero handle position. With handle at full power, meter should read 5 V.D.C.

3. SOUND POT ADJUSTMENTS:

- A. Remove amplifier edge connector (PC 583-926).
- B. Adjust pot to 250 ohms (left handle).
 - (1) Connect ohm meter between W-B and BLU-W at pot.
 - (2) Loosen set screw and remove gear.
 - (3) Rotate pot to 250 ohms.
 - (4) Replace gear, tighten set screw, and connect jack at PC 583-926.

4. SOUND POT:

- A. Remove amplifier edge connector PC 583-926.
- B. Adjust pot to maximum resistance, (approximately 6.25k ohms) (right handle).
 - (1) Connect ohm meter between wiper (center lead) and either outside lead.
 - (2) Loosen set screw and remove gear.
 - (3) Rotate pot to 6.25k ohms.
 - (4) Replace gear, tighten set screw, and connect jack at PC 583-926.

5. CREDIT BUTTON:

Credit switch must be adjusted to break before make. Failure to adjust switch as indicated will result in permanent damage to Logic Unit (PC 583-904).

6. BOOM COUNTER BALANCE WEIGHT:

- A. Position dampening pad to its center position.
- B. Be sure power control pot is set properly.
- C. Position "pitch" control handle to center position.
- D. Move "power" control handle to its maximum up position (do this slowly).
- E. Helicopter must rise to its maximum up position (boom hits top cap). Adjust weight in or out to have boom hit its stop within the last 10° of handle travel.
- F. If the helicopter has a very sensitive control in the vertical flight, the dampening pad may be adjusted up to apply more pressure. NOTE: Any time you re-adjust the dampening pad, you must re-adjust the counter balance weight (Item "E").

MIDWAY MFG. CO.

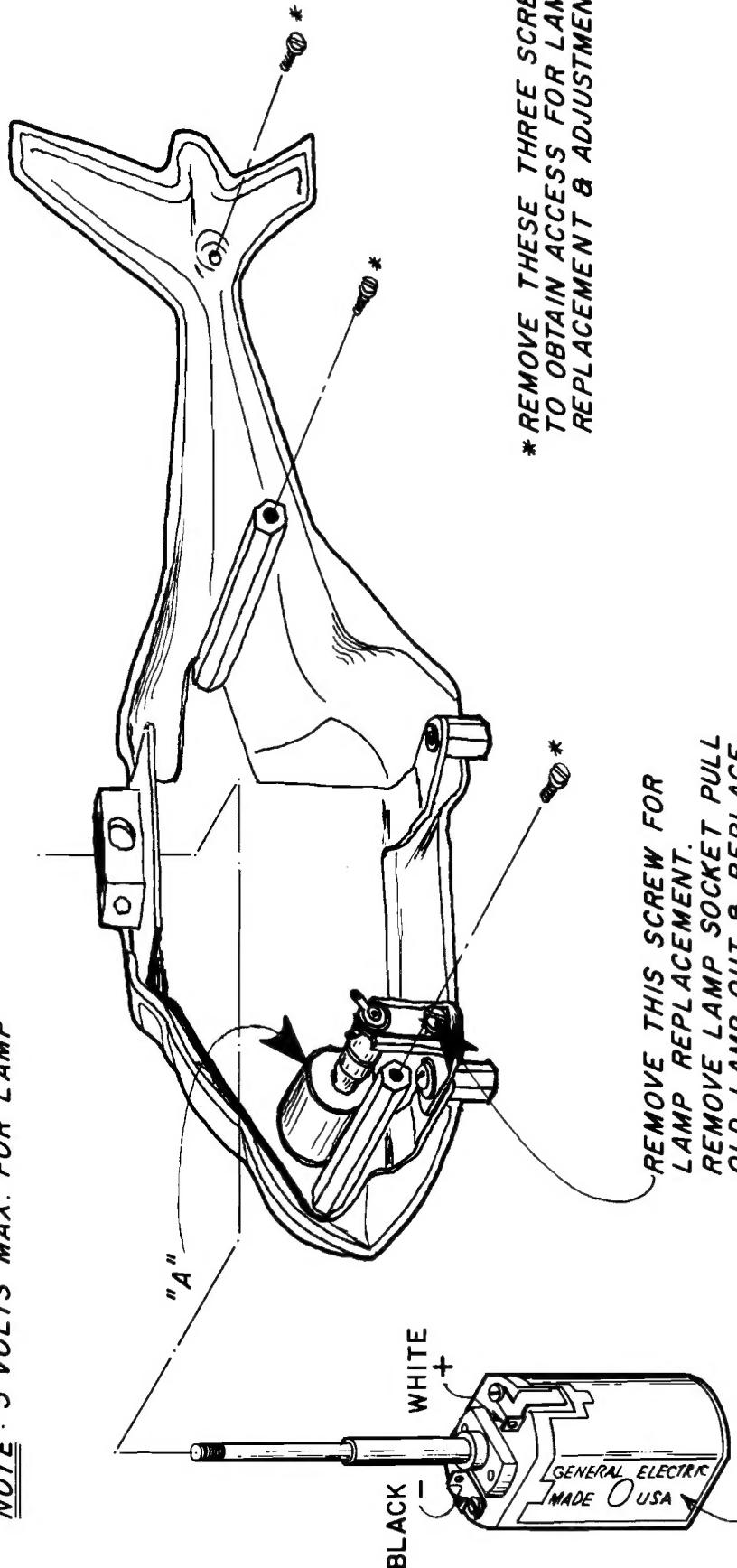
10750 WEST GRAND AVENUE

FRANKLIN PARK, ILLINOIS

LAMP & MOTOR REPLACEMENT

LAMP ADJUSTMENT IS ACCOMPLISHED BY FOCUSING THE LENS.
 THIS IS DONE BY ROTATING THE LENS HOUSING (MARKED "A")
 INSIDE THE HELICOPTER. TO OBTAIN PROPER FOCUS THE SPOT
 OF LIGHT SHOULD BE ADJUSTED AT A DISTANCE OF 3" AT THIS
 DISTANCE THE SPOT OF LIGHT SHOULD BE APPROX. 1" DIA.
 WITH CLEAR, SHARP EDGES. SEE DETAIL
 NOTE: 3 VOLTS MAX. FOR LAMP

DETAIL
 1" APPROX.



MIDWAY MFG. CO.

CABINET BREAKDOWN DETAIL

NOTE: In rare cases where doorways are under 34½" (width of cabinet), provisions have been made to disassemble upper parts of cabinet.

STEP 1:

Remove background scenery "E".

STEP 2:

Remove front and side viewing glass. Remove top cleats "A" (shown in detail), as well as inside members of front corner brackets "D". In order to remove side glass, the rear wooden retaining members "B" must be taken off.

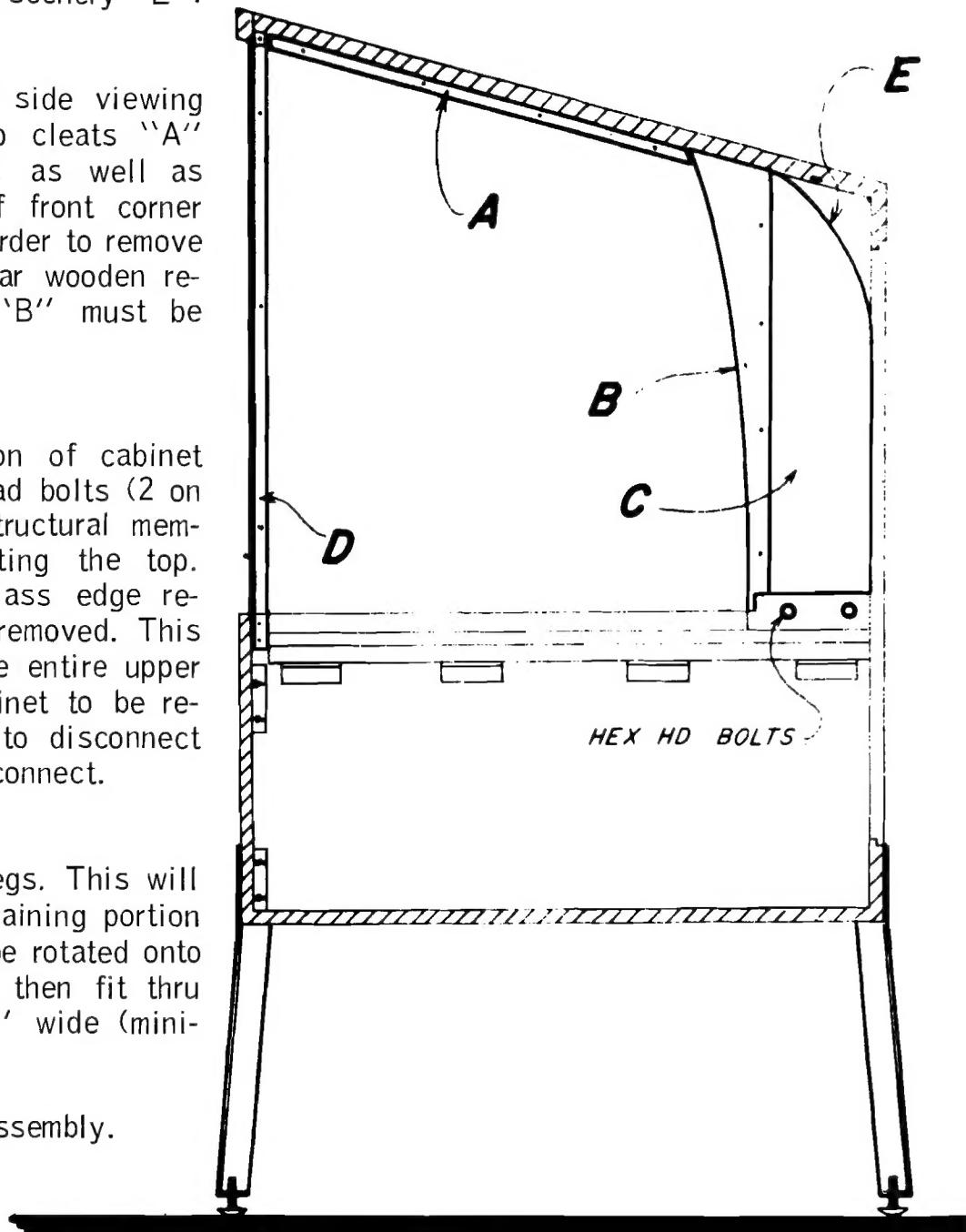
STEP 3:

Remove top portion of cabinet. Remove 4 hex. head bolts (2 on each side) from structural members "C" supporting the top. Then the front glass edge retainers should be removed. This will then allow the entire upper portion of the cabinet to be removed. Remember to disconnect the cable quick-disconnect.

STEP 4:

Remove the four legs. This will then allow the remaining portion of the cabinet to be rotated onto its side and will then fit thru most doorways 28" wide (minimum width).

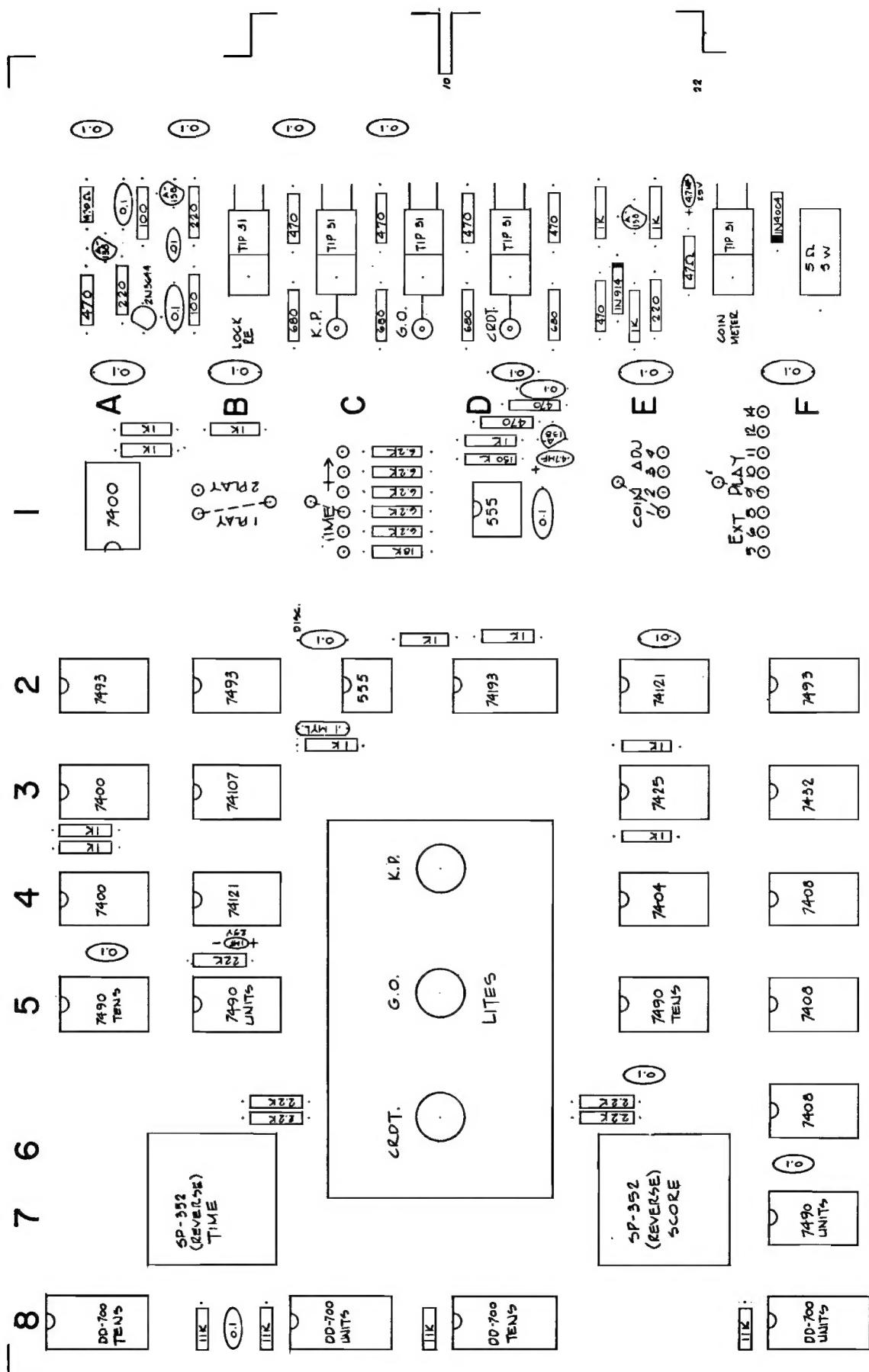
Reverse steps for assembly.



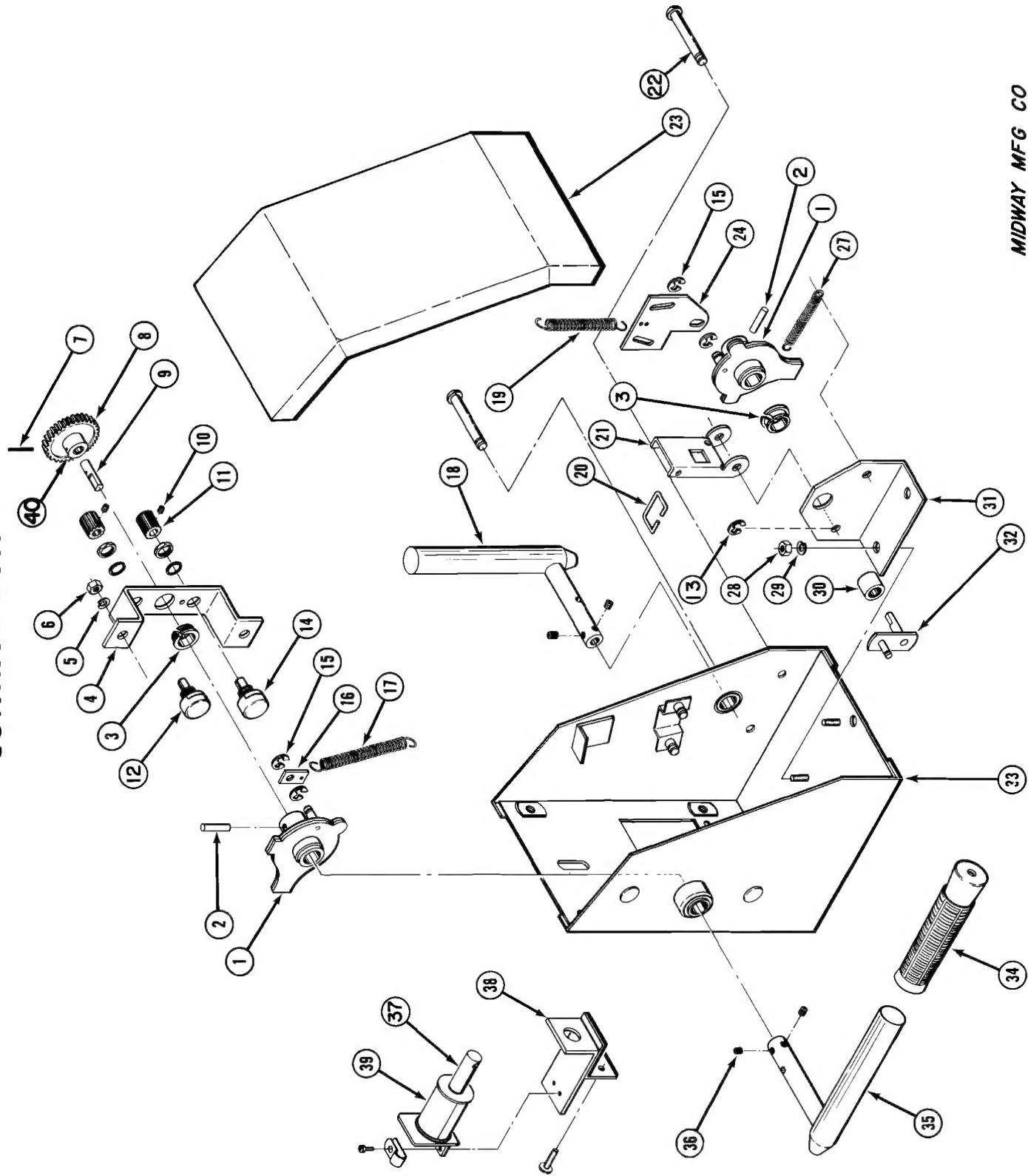
MIDWAY MFG. CO.

10750 WEST GRAND AVENUE

FRANKLIN PARK, ILLINOIS



CONTROL BOX



MIDWAY MFG CO

NO. 583 CHOPPER – CONTROL BOX ASSEMBLY

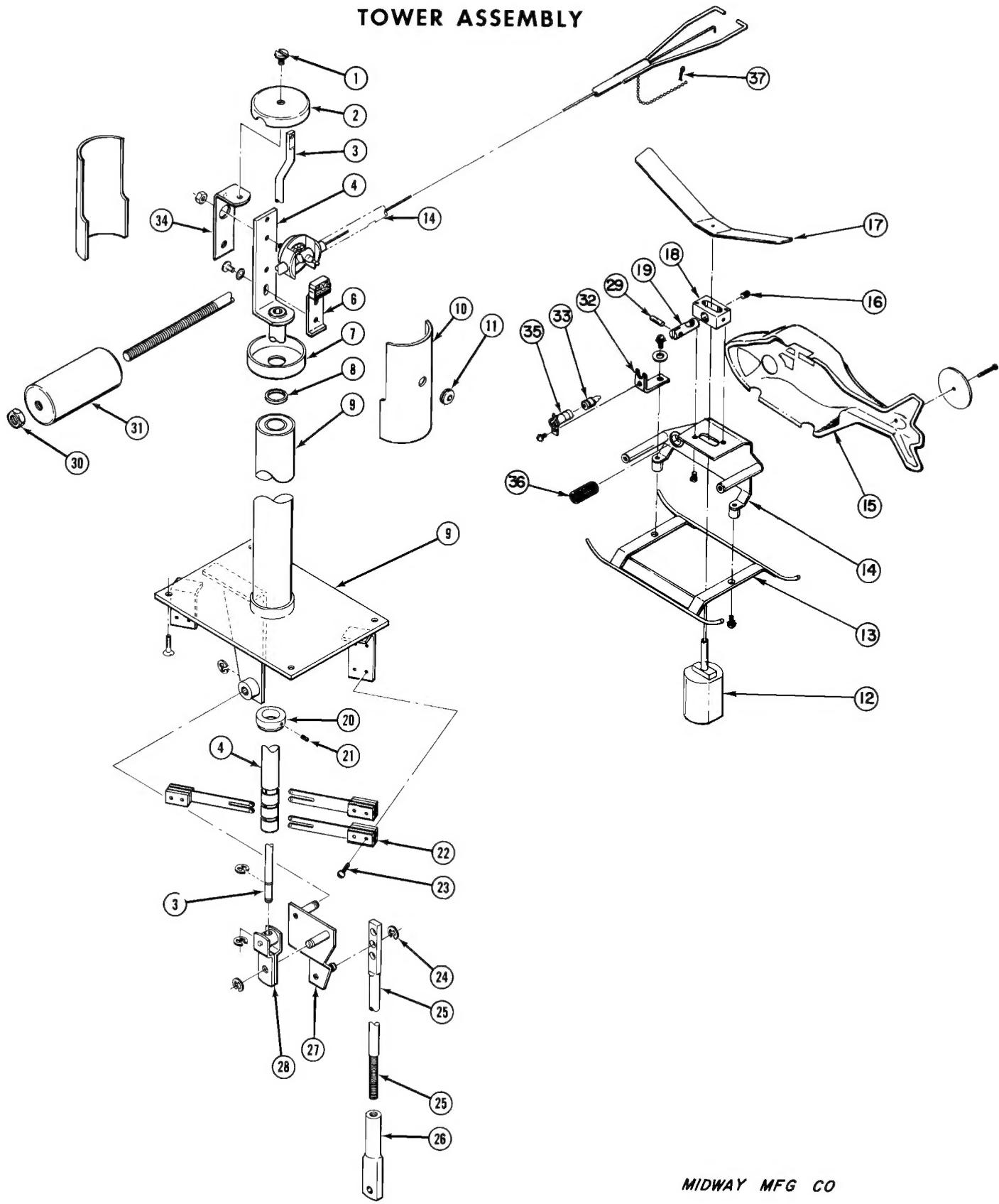
PRICE LIST**ORDER BY PART NUMBER ONLY**

ITEM	PART NO	DESCRIPTION	PRICE
1	583-018	CAM ASSEMBLY (2 REQUIRED)	5.80 EA.
2	17-7-115	DRIVE PIN 3/16 DIA. (2 REQUIRED)	.20 EA.
3	17-42-97	NYLINER (2 REQUIRED)	.20 EA.
4	583-116	BRACKET – SPEED CONTROL	1.60 EA.
5	17-104-05	LOCKWASHER #1/4 (2 REQUIRED)	.20 EA.
6	17-103-19	LOCKNUT 1/4-20 (2 REQUIRED)	.20 EA.
7	17-7-62	ROLL PIN	.20 EA.
8	17-42-96	GEAR (48 T., 32 P.)	.70 EA.
9	583-704	GEAR PIN	.40 EA.
10	17-101-309	SET SCREW 8-32 X 1/4 (2 REQUIRED)	.20 EA.
11	583-723	PINION – 16 TOOTH (2 REQUIRED)	1.80 EA.
12	17-13-143	POT 5K	5.00 EA.
13	17-100-38	"E" RING (2 REQUIRED)	.20 EA.
14	17-13-211	POT 10K	5.00 EA.
15	17-100-25	"E" RING (4 REQUIRED)	.20 EA.
16	601-131-1	SWIVEL BRACKET	.30 EA.
17	10-139	SPRING	.20 EA.
18	583-007	HANDLE ASSEMBLY R.H.	6.80 EA.
19	10-179-1	SPRING	.20 EA.
20	10-538-1	WIRE FORM	.30 EA.
21	600-130	LOCK BRACKET	1.00 EA.
22	583-720	PIN STOP (2 REQUIRED)	.60 EA.
23	583-020	COVER ASSEMBLY	11.80 EA.
24	583-149	CENTERING BRACKET	1.00 EA.
27	10-117-2	LOCKING SPRING	.20 EA.
28	17-103-19	LOCKNUT 1/4-20 (2 REQUIRED)	.20 EA.
29	17-104-05	LOCKWASHER #1/4 (2 REQUIRED)	.20 EA.
30	569-712	ROLLER – SPACER	.40 EA.
31	583-110	MOUNTING BRACKET	2.00 EA.
32	583-004	PIVOT BRACKET SUB. ASSEMBLY	1.60 EA.
33	583-003	CONTROL BOX SUB. ASSEMBLY	22.00 EA.
34	17-197-41-32	GRIP – BLACK R.H.	.30 EA.
34A	17-198-41-33	GRIP – RED L.H.	.30 EA.
35	583-006	HANDLE ASSEMBLY L.H.	6.50 EA.
36	17-101-309	8-32 X 1/4 SET SCREWS (4 REQUIRED)	.20 EA.
37	583-705	PLUNGER	1.00 EA.
38	22-001	STOP BRACKET ASSEMBLY	1.00 EA.
39	426-1200	COIL	2.40 EA.
40	583-005	GEAR & PIN SUB. ASS'Y. – Part No's. 7, 8 & 9	1.00 EA.

MIDWAY MFG. CO.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

TOWER ASSEMBLY



MIDWAY MFG CO

NO. 583 CHOPPER - TOWER ASSEMBLY

PRICE LIST**ORDER BY PART NUMBER ONLY**

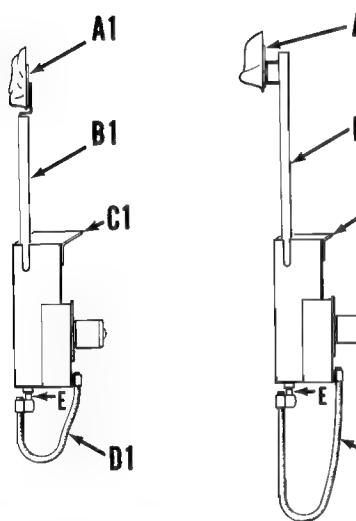
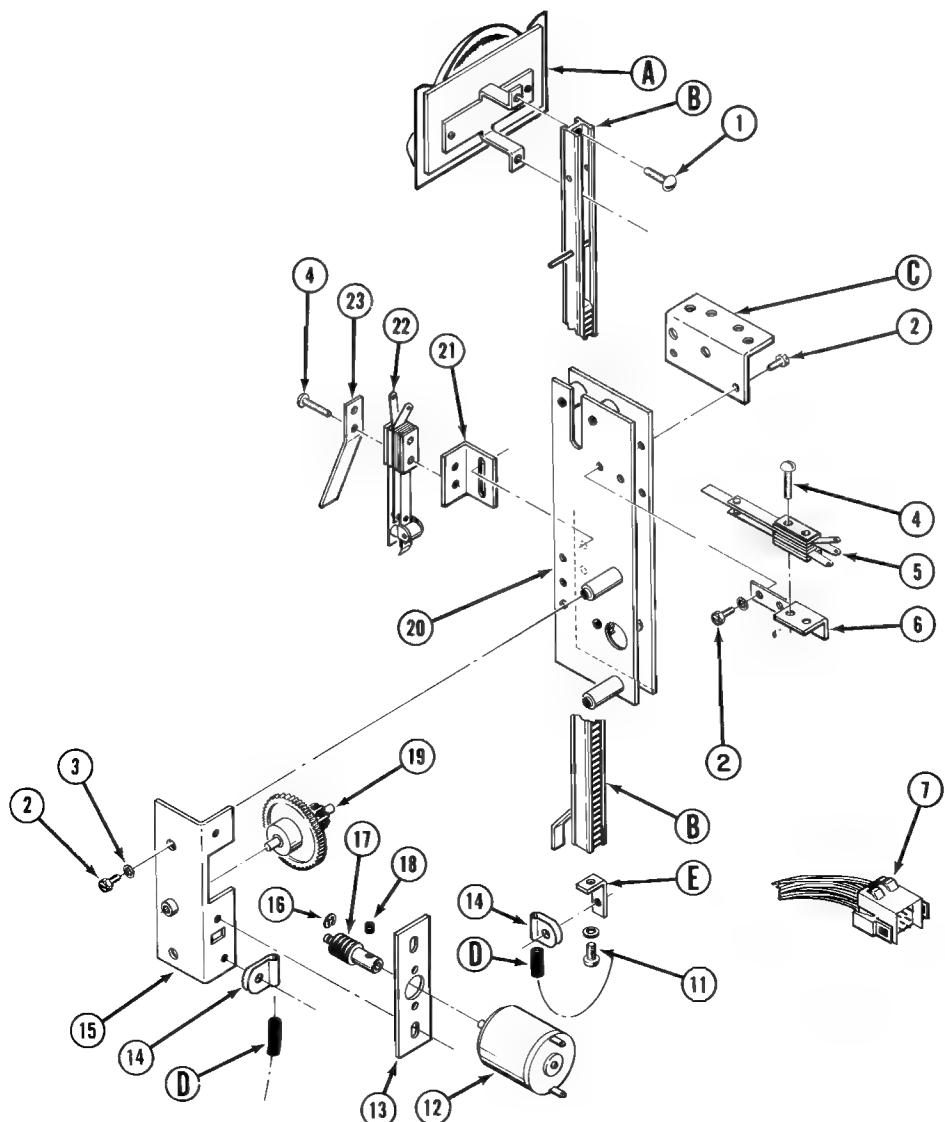
ITEM	PART NO	DESCRIPTION	PRICE
1	17-101-593	8-32 X 1/4 SCREW	.20 EA.
2	600-128	TOP	.60 EA.
3	583-719	CONTROL ROD	1.40 EA.
4	583-015	BOOM SUPPORT ASSEMBLY	14.40 EA.
5	583-027	BOOM ASSEMBLY	21.60 EA.
6	583-051	BRACKET & PAD ASSEMBLY	1.40 EA.
7	600-127	CUP BOTTOM	.50 EA.
8	17-104-34	5/8 X 7/16 X 1/16 WASHER	.20 EA.
9	583-016	TOWER TUBE SUB. ASSEMBLY	10.60 EA.
10	600-129-1	ENCLOSURE (2 REQUIRED)	1.20 EA.
11	17-085-41-40	GROMMET - RUBBER	.20 EA.
12	583-023	MOTOR ASSEMBLY	17.40 EA.
13	583-011	SKID ASSEMBLY	4.00 EA.
14	583-022	CHASSIS ASSEMBLY	5.40 EA.
15	583-025	HELICOPTER BODY KIT	10.00 EA.
16	17-101-302	6-32 X 3/16 LG. SET SCREW	.20 EA.
17	17-193-42-37	HELICOPTER PROP.	1.10 EA.
18	583-708	BLOCK, MOTOR PIVOT	6.00 EA.
19	583-712	PIVOT PIN	2.30 EA.
20	600-733	COLLAR	1.50 EA.
21	17-101-302	6-32 X 3/16 SET SCREW	.20 EA.
22	583-028	WIPER ASSEMBLY (3 REQUIRED)	2.60 EA.
23	17-101-520	5-40 X 3/8 PAN H.M.S.	.20 EA.
24	17-100-18	"E" RING	.20 EA.
25	601-705-1	LINK - HORIZONTAL	3.00 EA.
26	600-724-1	ADJ. LINK	2.10 EA.
27	583-008	BELL CRANK SUB. ASSEMBLY	1.40 EA.
28	601-105	PIVOT BRACKET S. A.	2.40 EA.
29	600-707	PIN	.42 EA.
30	17-103-18	1/4-20 HEX. NUT	.20 EA.
31	600-727	COUNTER BALANCE WEIGHT	3.80 EA.
32	583-141	MOUNTING BRACKET, SOCKET	1.10 EA.
33	17-3-129	LAMP G.E. #253 2.5V	3.20 EA.
34	583-130	COVER BRACKET	.60 EA.
35	17-31-22	SOCKET	1.40 EA.
36	583-024	LENS TUBE ASSEMBLY	9.00 EA.
37	583-026	CHAIN ASSEMBLY	.40 EA.
	583-021	COMPLETE HELICOPTER ASSEMBLY	64.90 EA.

MIDWAY MFG. CO.

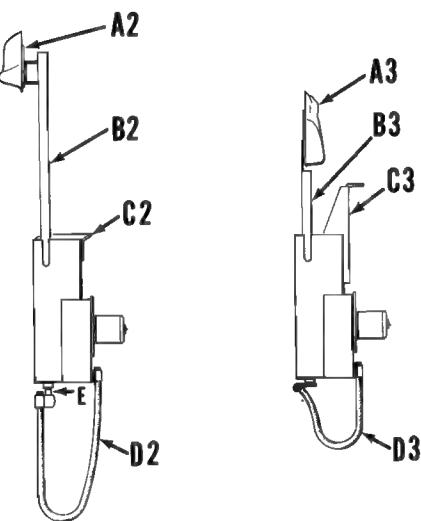
PRICES SUBJECT TO CHANGE WITHOUT NOTICE

PAGE 9

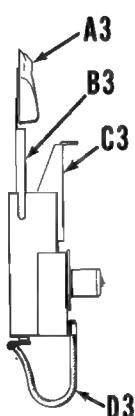
TARGET ASSEMBLY



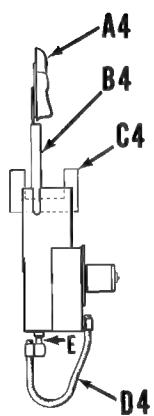
TARGET 1



TARGET 2



TARGET 3



TARGET 4

MIDWAY MFG CO

NO. 583 CHOPPER - TARGET ASSEMBLY

PRICE LIST**ORDER BY PART NUMBER ONLY**

ITEM	PART NO	DESCRIPTION	PRICE
1	17-101-569	6-32 X 1/2 OVAL HD. SCREW (2 REQUIRED)	.20 EA.
2	17-101-555	#6 X 5/16 HEX. HD. S/T M.S. (6 REQUIRED)	.20 EA.
4	17-101-527	#5-40 ROUND HD. M.S. (4 REQUIRED)	.20 EA.
5	583-049	LIMIT SWITCH ASSEMBLY (TOP)	1.40 EA.
6	583-113	LIMIT SWITCH BRACKET	.70 EA.
7	17-21-36	9 POINT MALE AMP HOUSING	.30 EA.
11	17-101-612	8-32 X 3/8 PAN HD. - MONEL M.S.	.20 EA.
12	17-3-127	MOTOR - TARGET	4.20 EA.
13	583-105	MOTOR PLATE	1.80 EA.
14	17-42-02	3/16 CLAMP (2 REQUIRED)	.20 EA.
15	583-036	BRACKET BEARING & MOTOR SUB. ASS'Y.	1.70 EA.
16	17-100-12	"E" RING	.20 EA.
17	583-037	WORM ASSEMBLY	1.60 EA.
18	17-101-320	#4-40 X 1/8 LG. SOCKET SET SCREW	.20 EA.
19	583-038	GEAR ASSEMBLY	5.00 EA.
20	583-031	TARGET UNIT SUB. ASSEMBLY	4.80 EA.
21	583-111	LIMIT SWITCH BRACKET	.50 EA.
22	583-047	LIMIT SWITCH ASSEMBLY (BOTTOM)	1.50 EA.
23	90-126-1	SWITCH BACKUP STRIP	.20 EA.
A1	583-044	SPACE CREATURE #1 ASSEMBLY	7.70 EA.
A2	583-043	SPACE SHIP ASSEMBLY	7.70 EA.
A3	583-046	SPACE CREATURE #3 ASSEMBLY	7.50 EA.
A4	583-045	SPACE CREATURE #2 ASSEMBLY	7.50 EA.
B1	583-035	SLIDE BAR ASSEMBLY	3.80 EA.
B2	583-032	SLIDE BAR ASSEMBLY	6.40 EA.
B3	583-034	SLIDE BAR ASSEMBLY	4.10 EA.
B4	583-034	SLIDE BAR ASSEMBLY	4.10 EA.
C1	583-125	MOUNTING BRACKET	.40 EA.
C2	583-125	MOUNTING BRACKET	.40 EA.
C3	583-125	MOUNTING BRACKET	.40 EA.
C4	583-125	MOUNTING BRACKET	.40 EA.
D1	10-225-1	EXTENSION SPRING	.50 EA.
D2	10-225-2	EXTENSION SPRING	.60 EA.
D3	10-225-1	EXTENSION SPRING	.50 EA.
D4	10-225-1	EXTENSION SPRING	.50 EA.
E	583-147	STRAIN RELIEF BRACKET	.70 EA.
	583-040	COMPLETE #1 TARGET N.W.	43.90 EA.
	583-039	COMPLETE #2 TARGET N.E.	43.90 EA.
	583-041	COMPLETE #3 TARGET S.E.	43.90 EA.
	583-042	COMPLETE #4 TARGET S.W.	43.90 EA.

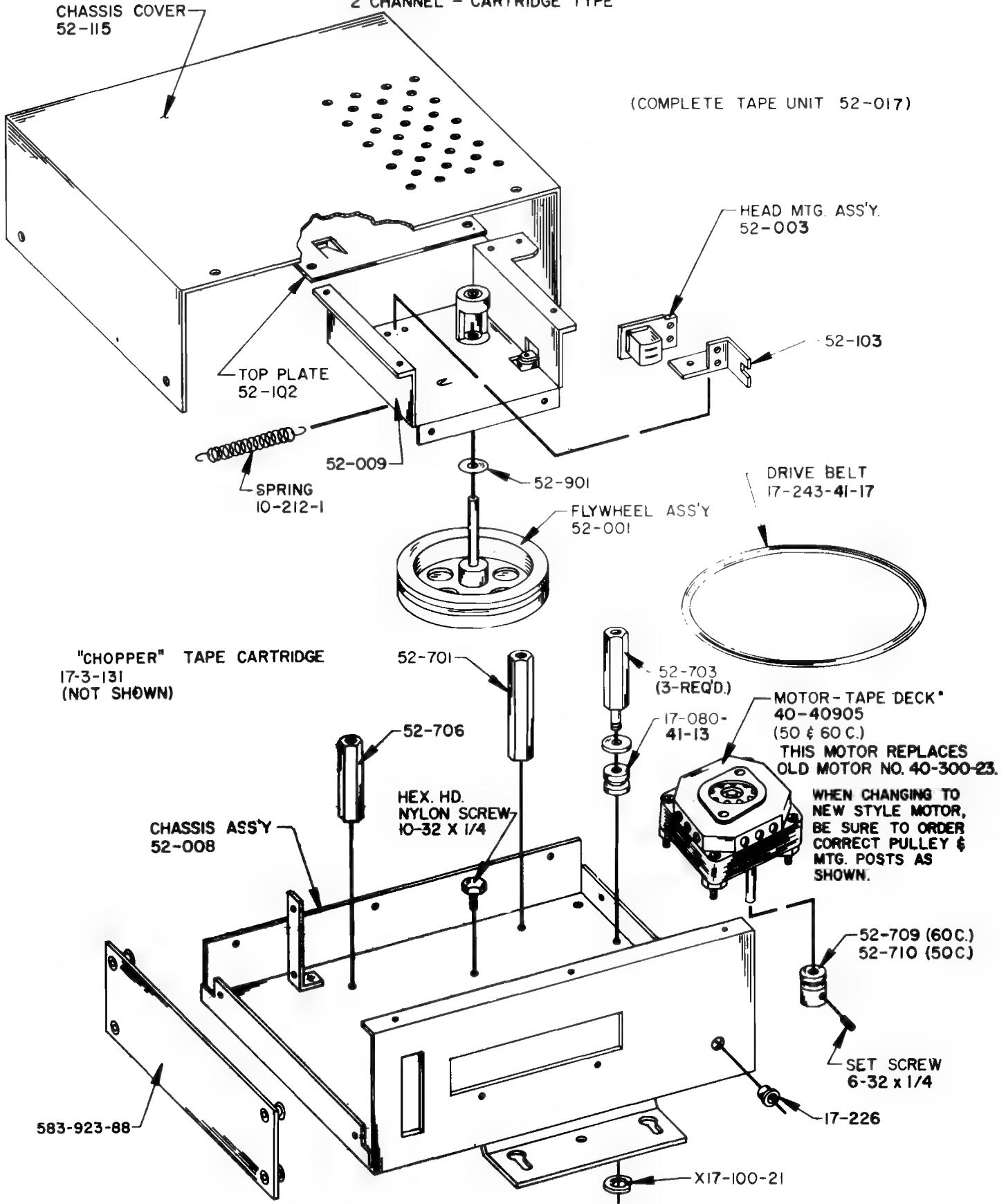
MIDWAY MFG. CO.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

PAGE 11

NO. 583 CHOPPER - TAPE DECK

2 CHANNEL - CARTRIDGE TYPE



MIDWAY MFG. CO.

NO. 583 CHOPPER – TAPE DECK (2 CHANNEL)

PRICE LIST**ORDER BY PART NUMBER ONLY**

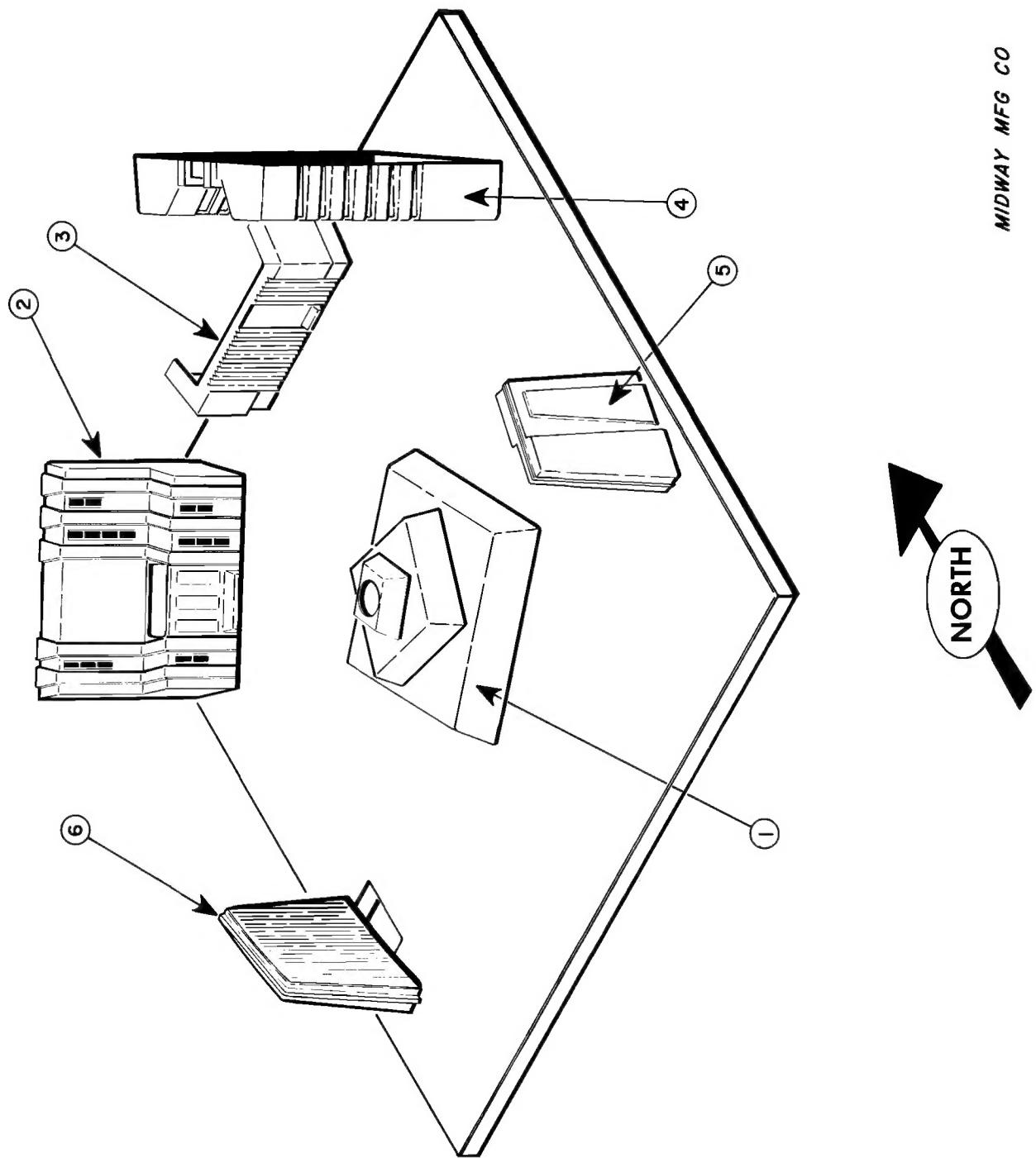
ITEM	PART NO	DESCRIPTION	PRICE
	10-212-1	SPRING – DETENT	.20 EA.
	17-3-131	TAPE CARTRIDGE	8.00 EA.
	17-080-41-13	RUBBER GROMMET	.20 EA.
	X17-100-21	“E” RING (7/32”)	.20 EA.
	17-226-42-16	PLASTIC SNAP BUSHING	.20 EA.
	40-40905	MOTOR – TAPE DECK (50 & 60C.) 1600 RPM	16.00 EA.
	52-001	FLYWHEEL ASSEMBLY	9.50 EA.
	52-003	HEAD MOUNTING ASSEMBLY	5.80 EA.
	52-008	CHASSIS ASSEMBLY	7.20 EA.
	52-009	BEARING PLATE ASSEMBLY	10.00 EA.
	52-017	COMPLETE TAPE UNIT W/O CARTRIDGE	95.00 EA.
	52-102	TOP PLATE	1.20 EA.
	52-103	TAPE GUIDE	.80 EA.
	52-115	CHASSIS COVER	3.20 EA.
	52-701	MOUNTING POST (2-11/16" LG.)	1.20 EA.
	52-703	MOTOR MOUNTING POST (3 REQUIRED)	.60 EA.
	52-706	MOUNTING POST (1-1/2" LG.)	1.70 EA.
	52-709	MOTOR PULLEY (60C.)	2.60 EA.
	52-710	MOTOR PULLEY (50C.)	2.80 EA.
	52-901	WASHER – SPECIAL	.20 EA.
	568-048	TAPE DECK MOUNTING BRACKET ASSEMBLY (2 REQUIRED) NOT SHOWN	.70 EA.
	583-923-88	TAPE DECK PRE-AMP P.C.	36.00 EA.

MIDWAY MFG. CO.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

PAGE 13

PLAYFIELD



PRICE LIST**ORDER BY PART NUMBER ONLY**

ITEM	PART NO	DESCRIPTION	PRICE
1	583-917	VACUUM FORMED PLAYFIELD	35.00 EA.
2	583-918-1	BUILDING, VACUUM FORMED - N.W.	8.00 EA.
3	583-918-2	BUILDING, VACUUM FORMED - N.	8.00 EA.
4	583-918-3	BUILDING, VACUUM FORMED - N.E.	8.00 EA.
5	583-918-4	BUILDING, VACUUM FORMED - S.E.	8.00 EA.
6	583-918-5	BUILDING, VACUUM FORMED - S.W.	8.00 EA.
	17-9-96	LYCHEN, GREEN (NOT SHOWN)	.20 EA.
	17-9-98	TREE (NOT SHOWN)	.60 EA.
	17-9-99	TREE (NOT SHOWN)	.60 EA.
	17-9-100	TREE (2 REQUIRED) (NOT SHOWN)	.60 EA.
	17-9-101	TREE (NOT SHOWN)	.60 EA.
	17-9-151	TOY CARS (NOT SHOWN)	1.40 EA.
	17-9-152	TOY CARS (NOT SHOWN)	1.40 EA.
	17-9-153	TOY CARS (NOT SHOWN)	1.40 EA.

MIDWAY MFG. CO.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

PAGE 15

NO. 583 CHOPPER – ADDITIONAL PARTS LIST

PRICE LIST**ORDER BY PART NUMBER ONLY**

ITEM	PART NO	DESCRIPTION	PRICE
	CD-24-300	COIL	2.40 EA.
	G-30-2000D	LOCK & HIT RELAY COILS (2 REQUIRED)	2.00 EA.
	M-34-2400	RELAY COILS (6 REQUIRED)	2.40 EA.
	M-645-120	PROGRAM UNIT	6.00 EA.
	MT-43	60 CYCLE TRANSFORMER	35.00 EA.
	MT-44	50 CYCLE TRANSFORMER	39.00 EA.
	17-3-102	6V. ENM COUNTER	10.80 EA.
	17-3-130	FLUORESCENT LAMP 30"	5.20 EA.
	17-41-576	GASKET	.20 EA.
	17-034-32-05	ON/OFF SWITCH	.90 EA.
	17-050-5-46	LOCK (1350) WITH KEYS	3.40 EA.
	17-093-102-48	LEG LEVELERS WITH NUTS (4 REQUIRED)	.40 EA.
	17-175-3-32	4" DIAMETER SPEAKER (2 REQUIRED)	5.40 EA.
	17-257-3-65	A.C. LINE CORD (16 FT.)	4.60 EA.
	549-128	GRILL (2 REQUIRED)	1.00 EA.
	552-170	GAME LEGS	24.00 EA.
	567-106-1	SWITCH PLATE	.60 EA.
	582-100	VENT GRILL	.70 EA.
	583-054	STEP-UP DRUM UNIT ASSEMBLY COMPLETE	18.90 EA.
	583-073	REFLECTOR & FLUORESCENT ASSEMBLY	22.00 EA.
	583-107	SCORE BILLBOARD FRAME	1.90 EA.
	583-145	COIN BOX COVER	1.40 EA.
	583-146	COIN BOX	6.40 EA.
	583-900	GLASS (FRONT)	16.60 EA.
	583-900-1	GLASS (SIDES)	14.40 EA.
	583-901	SCORE PLEX.	4.60 EA.
	583-904-1-88	GAME LOGIC BOARD	200.00 EA.
	583-913-88	COPTER MOTOR SPEED	59.00 EA.
	583-919	SCENERY BACKGROUND	20.40 EA.
	583-922-88	TARGET MOTOR SPEED	114.00 EA.
	583-924-1-88	PHOTO DETECTOR	64.80 EA.
	583-925-88	POWER SUPPLY	48.00 EA.
	583-926-88	AMPLIFIER	67.00 EA.

MIDWAY MFG. CO.

CHOPPER EQUIPMENT CHART

COIL	PER GAME	APPLICATION
A-26-1200	1	Handle Release Coil.
CD-24-300	1	Program Unit ADVANCE Coil.
G-30-200 DC.	2	Lock and Hit Relay Coils.
M-34-2400 DC.	6	#1, #2, #3, #4 Target, Program and Extended Play Relay Coils.

MISCELLANEOUS

MT-43	1	60 Cycle Transformer
MT-44	1	50 Cycle Transformer
17-3-127	4	Target Motors 6000 RPM. D.C.
40-40905	1	Tape Deck Motor 1600 RPM.
583-023	1	Copter Motor 3000 RPM. D.C.

PRINTED CIRCUITS

M-465-120	1	Program Unit
583-904	1	Logic Serial #101 – #177
583-904-1	1	Logic Serial #178
583-913	1	Copter Motor Speed
583-922	1	Target Motor Speed
583-923	1	Pre-Amp
583-924	1	Photo Detector
583-925	1	Power Supply
583-926	1	Amplifier